

IN THE CLAIMS:

Please amend the claims as follows:

1-16. (Canceled)

17. (Currently Amended) A viral effector library packaged in viral particles consisting essentially of:

[[-]] viral vectors;

[[-]] a defined set of at least 100 effector nucleic acid sequences ~~of known sequence~~ inserted into the viral vectors, wherein each of the at least 100 effector nucleic acid sequences of known sequence are in the set has a specific sequence of mammalian origin and corresponds to a specific location of a surface of a ~~te-probes on a nucleic acid microarray~~ upon which the effector nucleic acid sequences are synthesized; and

[[-]] one or more eukaryotic promoters operably linked to the effector nucleic acid sequences ~~of known sequence~~.

18. (Original) The viral effector library of claim 17, wherein there are at least 1000 heterogenous nucleic acid sequences inserted into the viral vectors.

19. (Withdrawn) The viral effector library of claim 18, wherein there are at least 10,000 heterogenous nucleic acid sequences inserted into the viral vectors.

20. (Withdrawn) The viral effector library of claim 19, wherein there are at least 35,000 heterogenous nucleic acid sequences inserted into the viral vectors.

21. (Original) The viral effector library of claim 17, wherein the viral vector is a retroviral vector.

22. (Original) The viral effector library of claim 21, wherein the retroviral vector is a lentiviral vector.
23. (Original) The viral effector library of claim 17, wherein the effector nucleic acid sequences code for cDNAs, siRNAs, peptides or protein domains.
24. (New) The viral effector library of claim 17, wherein the effector nucleic acid sequences code for siRNAs.
25. (New) The viral effector library of claim 17, wherein the effector nucleic acid sequences code for peptides.
26. (New) A method for making a packaged viral effector library, comprising:
cloning a defined set of nucleic acid sequences into a viral expression vector to produce a library of effector constructs, wherein the defined set of nucleic acid sequences comprises at least 100 different effector sequences and is made by a method comprising:
synthesizing a set of nucleic acid sequences on a surface of a microarray, wherein each nucleic acid sequence has a specific sequence and is synthesized in a specific location of said surface;
detaching the set of nucleic acid sequences from the microarray; and
amplifying the detached set of nucleic acid sequences by polymerase chain reaction, thereby generating the defined set of nucleic acid sequences; and
packaging the library of effector constructs into viral particles to produce a viral effector library.
27. (New) A method for making a viral effector library, comprising:
synthesizing a set of at least 100 different effector nucleic acid sequences on a surface of a microarray, wherein each nucleic acid sequence has a specific sequence and is synthesized in a specific location of said surface;

detaching the set of nucleic acid sequences from the microarray;
amplifying the detached set of nucleic acid sequences by polymerase chain reaction, thereby generating a defined set of nucleic acid sequences; and
cloning the defined set of nucleic acid sequences into a viral expression vector to produce a library of effector constructs.

28. (New) The method claim 27, further comprising packaging the library of effector constructs into viral particles to produce a viral effector library.